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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,869	12/07/2001	Richard Warren Tanzer	12870.1	6318
22827	7590	06/28/2005	EXAMINER	
DORITY & MANNING, P.A. POST OFFICE BOX 1449 GREENVILLE, SC 29602-1449				STEPHENS, JACQUELINE F
ART UNIT		PAPER NUMBER		
		3761		

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/010,869	TANZER ET AL.
	Examiner	Art Unit
	Jacqueline F. Stephens	3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 28 April 2005.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-9 and 19-26 is/are pending in the application.

4a) Of the above claim(s) 4,22 and 26 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-3,5-9,19-21 and 23-25 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/28/05 has been entered.

### ***Response to Amendment***

2. The amendment filed 4/28/05 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: a first wicking layer and second retention layer bonded with a bonding agent comprising polyhydroxyalkanoate and having an Absorbent Capacity at 15 cm of at least about 5 grams of liquid per gram of second retention layer.

Applicant is required to cancel the new matter in the reply to this Office Action.

### ***Specification***

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract

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on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-3, 5-9, 19-21, and 23-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention:

As set for in MPEP 2164.04, the Examiner has the initial burden to establish a reasonable basis to question the enablement provided for the claimed invention. While the analysis and conclusion of a lack of enablement are based on the factors discussed in MPEP 2164.04(a) and the evidence as a whole, it is not necessary to discuss each factor in the written rejection. The language should focus on those factors reasons and evidence that lead the examiner to conclude the specification fails to teach how to make and use the claimed invention without undue experimentation or that the scope of

enablement provided to one skilled in the art is not commensurate with the scope of protection sought by the claims.

First, the specification, while being enabling for measuring an Absorbent Capacity of a composite having a wicking layer of Uncreped Through Air Dried combined with a superabsorbent layer, does not reasonably provide enablement for measuring other types of wettable cellulosic lamellae and retention layer combinations. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

Second, in the instant application, no test or method has been disclosed with regard to measuring saturation capacity in terms of grams/gram. In all of the tables provided, a measure of saturation is provided as percentage of some quantity.

Third, the absorbent capacity is enabled for a measurement of saline solution only, and the specification does not reasonably provide enablement for measuring the absorbent capacity of the broadly claimed 'liquids'. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

Fourth, the claims set forth the physical characteristics desired of the composite alone rather than the specific composition of the composite in the end product. Therefore, relying on Ex parte Slob, 157 USPQ 172, such claims could cover any conceivable combination of materials whether presently existing or which might be discovered in the future and which would impart the desired characteristic, i.e. the

claims are too broad and indefinite since they purport to cover everything having the claimed characteristics regardless of its composition (It should be noted that 35 USC 101 sets forth "Whoever invents or discovers any new and useful... composition of matter... may obtain a patent therefor... title, i.e. does not include composition that have yet to be invented and discovered.).

Fifth, the claims basically set forth a wicking layer and retention layer and a bonding agent used to bond the two layers. The claims do not set forth the specific processes or materials required to achieve the characteristics, which have an open ended range of "at least about", and thus the claims could cover any conceivable number greater than 5 as well as any present or future end product, which includes at the very least a wicking layer of wettable cellulosic lamellae, a broadly recited retention layer, and a bonding agent. For these reasons and evidence, the examiner concludes the specification fails to teach how to make and use the claimed invention without undue experimentation or that the scope of enable provided to one skilled in the art is not commensurate with the scope of protection sought by the claims.

6. Claims 3, 21, and 25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Independent claims 1, 19, and we require the bonding agent bond the first wicking layer to the second retention layer as

well as a certain saturation capacity and Absorbent capacity. The disclosure provides embodiments of (1) an undisclosed bonding agent used to bond the wicking layer and retention layer having a saturation % and Absorbent capacity - Example X; and (2) a wicking and retention composite using a crosslinking agent as the bonding mechanism Example XI having a saturation % and Absorbent capacity. Claims 3, 21, and 25 require a bonding agent comprising polyhydroxyalkanoate. However, an embodiment having this specific bonding agent and having the claimed saturation capacity and Absorbent capacity is not taught in the disclosure of the present invention.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 1-3, 5-9, 19-21, and 23-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Independent claims 1, 19, and 23 recite physical properties of a saturated capacity of at least about 5 grams of liquid per gram of composite absorbent structure, and an Absorbent Capacity at 15 cm of at least about 5 grams of liquid per gram of second retention layer. Ex parte Slob, 157 USPQ 172, state the following regarding an article claimed by defining property values "Claims merely setting forth physical characteristics desired in an article, and not setting forth specific compositions which would meet such characteristics, are invalid as vague, indefinite, and functional since they cover any conceivable combination of ingredients either presently existing or which might be discovered in future and which would impart

desired characteristics; thus, an expression a liquefiable substance have a liquefaction temperature from about 40 degrees Centigrade to about 300 degrees C and being compatible with the ingredients in the powdered composition, is too broad and indefinite since it purports to cover everything which will perform the desired function regardless of its composition, and in effect, recites compounds by what it is desired that they do rather than what they are; expression also is too broad since it appears to read upon materials that cold not possibly be used to accomplish purposes intended."

Thus, claims 1-3, 5-9, 19-21, and 23-25 are indefinite for reciting only the desired physical properties of the stated composite, rather than setting forth structural and/or chemical characteristics of said composite.

#### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 1-3, 5-9, 19-21, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dutkiewicz et al. USPN 5843852 in view of Bastioli et al. USPN 5286770 and further in view of Edgington et al. USPN 6365680.

As to claims 1, 5, 6-9, 19, and 23, Dutkiewicz discloses the present invention substantially as claimed. Dutkiewicz discloses a transport layer having the claimed properties, see col. 6, line 42 through col. 7, line 52. Dutkiewicz discloses an absorbent structure for use as a diaper, however, Dutkiewicz does not specifically disclose a second retention layer comprising a hydrogel-forming polymeric material. Bastioli discloses a retention layer having hydrogel-forming polymeric material (col. 10, lines 8-11). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the article of Dutkiewicz to have a retention layer comprising hydrogel-forming polymeric material for the benefit of increasing moisture absorption in a relatively thin pad.

Dutkiewicz/Bastilio do not disclose the claimed absorbent capacity. Dutkiewicz/Bastilio recognizes the size and absorbent capacity of the absorbent core may vary to accommodate wearers of different sizes (Bastilio col. 9, line 64 through col. 10, line 6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the article of Dutkiewicz/Bastilio with the claimed

absorbent capacity, since discovering an optimum value of a result effective variable involves only routine skill in the art.

Dutkiewicz/Bastilio do not disclose a bonding agent bonding the wicking layer and second retention layer. Edgington et al. discloses a poly(lactic) acid bonding agent used as a construction adhesive for disposable absorbent articles. It would have been obvious to one having ordinary skill in the art to modify Dutkiewicz/Bastilio to have a bonding agent bond the wicking and retention layers for the benefit of providing a biodegradable article, which Edgington teaches (col. 2, lines 1-7) and for the additional benefit of securing the superabsorbent material to prevent loose absorbent, which can be irritating to a user.

As to claims 2, 20, 24 Dutkiewicz/Bastilio/Edgington discloses a dry tensile and a wet tensile strength (Dutkiewicz col. 8, lines 26-46). However, Dutkiewicz/Bastilio/Edgington does not disclose a dry or wet geometric mean breaking length. The liquid transport structure of Dutkiewicz/Bastilio/Edgington has the same properties (vertical flux) and is used in the same environment as applicant's wicking layer. Therefore, the general conditions of the claimed invention are present in the prior art. Even though Dutkiewicz/Bastilio/Edgington does not disclose the specific geometric mean breaking length, applicant has not disclosed the claimed geometric mean breaking length value is critical. The claims are structural claims and liquid transport structure, results in a structure that is capable of transporting fluids at a high rate. Therefore, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to provide the structure of Dutkiewicz/Bastilio/Edgington with the claimed geometric mean breaking length of the present invention, since where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation, *In re Aller et al.* 105 USPQ 233.

12. Claims 3, 21, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dutkiewicz/Bastilio/Edgington as applied to claims 1, 10, 19, and 24 above, and further in view of Noda USPN 5685756.

Dutkiewicz/Bastilio/Edgington discloses the present invention substantially as claimed. However, Dutkiewicz/Bastilio/Edgington do not disclose the binding agent is polyhydroxyalkanoate. Noda discloses the use of polyhydroxyalkanoate as a binding agent in a disposable article for the benefit of providing a compostable product (col. 2, lines 1-8). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the invention of Dutkiewicz/Bastilio/Edgington to comprise polyhydroxyalkanoate for the benefits disclosed in Noda.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacqueline F. Stephens whose telephone number is (571) 272-4937. The examiner can normally be reached on Monday-Friday 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Schwartz can be reached on (571) 272-4390. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jacqueline F Stephens  
Examiner  
Art Unit 3761

June 24, 2005